



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/536,205	03/27/2000	Kayla R. Klingman	6836-US	3499

7590 10/19/2004

Thomas F Lenihan
Tektronix Inc
PO Box 500
Delivery Station 50-Law
Beaverton, OR 97077

EXAMINER

CHUNG, DANIEL J

ART UNIT	PAPER NUMBER
----------	--------------

2672

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/536,205

Applicant(s)

KLINGMAN ET AL.

Examiner

Daniel J Chung

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claims 1-6 are presented for examination. This office action is in response to the amendment filed on 7-1-2004.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Etheridge et al (5,986,637) in view of Sullivan et al (6,163,758).

Regarding claim 1, Etheridge et al discloses that the claimed feature of a method of operating an oscilloscope that is capable of displaying simultaneously multiple waveforms representing time evolution of a signal during respective acquisition intervals, comprising: a) acquiring [30] waveform data using a first set of acquisition parameters (See Fig 1, Fig 3); b) generating [50] a display based on the waveform data acquired in step a), in the event that the display generated in step b) includes a waveform that is visually distinct from other displayed waveforms [i.e. "anomalous signal"] (See Fig 1, Fig 3, Abstract, col 1 line 58-col 2 line14, col 3 line 5-10, col 11 line 31-62); c) selecting [57] a feature [i.e. "new pixel identifier and counter"] that

Art Unit: 2672

distinguishes the visually distinct waveform from other displayed waveforms, (See Fig 1, Fig 3, Abstract, col 1 line 58-col 2 line 14, col 3 line 5-10, col 11 line 31-62); d)

automatically deriving [55,57] acquisition parameters that discriminate between the selected feature and other features of the displayed waveforms, (See Fig 1, Fig 3,

Abstract, col 3 line 35-col 4 line 6, col 11 line 20-col 12 line 17); e) acquiring [30]

waveform data using the acquisition parameters derived in step d), and f) generating[50]

a display ["new composited image"] based on the waveform data acquired in step e)

(See Fig 1, Fig 3, Abstract, col 3 line 35-col 4 line 6, col 11 line 20-col 12 line 17)

Etheridge et al does not specifically disclose that "acquiring waveform data using automatically derived acquisition parameters that discriminate between the selected feature and other features of the displayed waveform". However, such limitations are shown in the teaching of Sullivan et al. ["detecting unusual waveforms by determining new pixel counter" (step c in presented claim), then "re-rasterized the waveforms (step f in presented claim) with extra intensity or into a different color (step d, step e in presented claim)"]. (See Abstract, col 1 line 1-8, col 4 line 8-col 5 line 11, col 12 line 15+)

It would have been obvious to one skilled in the art to incorporate the teaching of Sullivan into the teaching of Etheridge et al, in order to "allow a user to reliably see/control input signal anomalies even when they occur only intermittently" (See col 3 line 5-16 in Etheridge, also See col 4 line 8-14 in Sullivan), thereby generating superior display accuracy for the analyzed waveform data with not complicated way of operating an oscilloscope, as such improvement is also advantageously desirable in the teaching

of Etheridge et al for providing clear visual representation for selecting and combining various display parameters with simple and uncomplicated operation at faster processing time.

Regarding claim 2, refer to the discussion for the claim 1 hereinabove Etheridge et al discloses that step c) includes graphically defining a template that specifies the selected feature and step d) includes employing information regarding the template to derive additional acquisition parameters. (See Fig 1, Fig 3, col 12 line 9-16; Also See Fig 2, col 4 line15-col 5 line 11 in Sullivan)

Regarding claim 3, refer to the discussion for the claim 1 hereinabove Etheridge et al discloses that the oscilloscope has multiple trigger modes[20], step c) includes graphically defining a template that specifies the selected feature and step d) includes employing information regarding the template to select a trigger mode for preferentially acquiring waveforms that include the selected feature. (See Fig 1, Fig 2, Fig 3, Abstract, col 3 line 35-col 4 line 6; Also See Fig 2, col 4 line15-col 5 line 11 in Sullivan)

Regarding claim 4, refer to the discussion for the claim 1 hereinabove, Etheridge et al discloses that the template is a scalable rectangular box and step c) includes positioning and sizing the box so that it contains the selected feature. (See Fig 1, Fig 3, Abstract, col 3 line 35-col 4 line 6; Also See Fig 2, col 4 line15-col 5 line 11 in Sullivan)

Regarding claim 5, refer to the discussion for the claim 1 hereinabove, Etheridge et al discloses that the oscilloscope has a display screen on which the waveforms are displayed and the template is a sketch generated on the display screen. (See Fig 1, Fig 3, Abstract, col 3 line 35-col 4 line 6; Also See Fig 2, col 4 line 15-col 5 line 11 in Sullivan)

Regarding claim 6, claim 6 is similar in scope to the claim 1, and thus the rejection to claim 1 hereinabove is also applicable to claim 6.

Response to Arguments/Amendments

Applicant's arguments with respect to claims 1-6 have been considered. However, they do not overcome the previous rejections, which have been maintained. Thus, the finality of this office action is deemed proper.

Specifically, Applicant argued that the cited references do not disclose that "selection of a feature within displayed waveforms" (See Remarks p.3 line 1-2) and "selecting a feature in displayed waveforms". (See Remarks p.3 line 7-8) However, it is noted that the features upon which applicant relies (i.e. selecting within/in displayed waveforms) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In fact,

Art Unit: 2672

Applicant fails to specifically describe the method of "selecting a feature" in presented claims. [i.e. "user manually selects a feature of distinct waveform within displayed waveforms", "system automatically selects a feature of distinct waveform by comparing with reference waveform"...etc] Since patent office is entitled to take the broadest reasonable interpretation of any claim, in this case, the method of "detecting a new pixel in the process of defining the unusual waveforms" of Etheridge et al and Sullivan et al, can be considered as "selecting a feature" in recited claims, as broadly claimed ["selecting a feature"] by applicant. Furthermore, Applicant argued that the cited reference do not disclose that "automatically deriving acquisition parameters" and "acquiring waveform data using the derived parameters." (See Remarks p.3 line 11-12) However, Sullivan et al clearly discloses that "automatically discovering parameters of unusual waveform" and "re-rasterizing unusual waveforms with extra intensity or a different color" (See Abstract line 1-10, col 4 line 16-49)

Conclusion

Applicant's response and amendment are not persuasive and the previous grounds of rejection have been maintained. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 2672

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Chung whose telephone number is (703) 306-3419. He can normally be reached Monday-Thursday and alternate Fridays from 7:30am- 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael, Razavi, can be reached at (703) 305-4713.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9306 (Central fax)

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

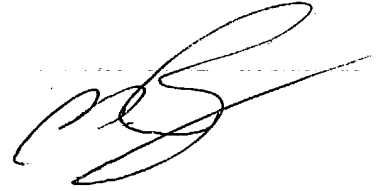
Application/Control Number: 09/536,205

Page 8

Art Unit: 2672

djc

October 14, 2004

A handwritten signature in black ink, appearing to read 'MRZ', is positioned above the printed name and title.

MICHAEL RAZAVI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600